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MINI 9 - PAS 2.54 MM

MINI 9 - PAS 2.54 MM



Le connecteur miniature **MINI 9**, 2 rangées au pas de 2.54 mm en quinconce et 1.905 mm entre rangées, est directement dérivé de la gamme HE 809 et bénéficie de ses caractéristiques :

- Epaisseur réduite 4.9 mm
- Robustesse
- Sécurité de contact à l'extraction > 1.5 mm
- Variantes CMS : droite et coudée avec fixation sur carte par verrouillage ou par brasage

Matériaux

- Boîtier : Thermoplastique classe UL 94 V0
- Contacts : Découpés alliage cuivreux
- Fixations : Acier inoxydable

Protection sélective des contacts

- Interface dorée, partie arrière étamée

Caractéristiques

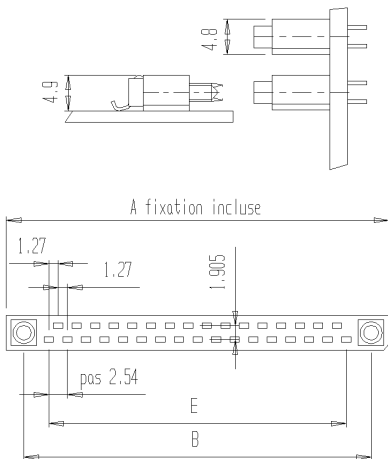
Mécanique

- Endurance mécanique : 500 manœuvres min.
- Vibrations sinusoïdales : 0/2000 Hz – 20 g efficace - discontinuité < 2 ns
- Vibrations aléatoires : 0/2000 Hz – 9 g efficace - discontinuité < 2 ns
- Force d'accouplement et désaccouplement : 0,14 à 0.7 N par contact
- Catégorie climatique : - 55° C à + 125° C

Electrique

- Tension de service : 150 Veff. 50 Hz
- Tension d'essais : 750 Veff. 50 Hz
- Courant nominal : 3 A
- Résistance de contact : 12 mΩ max.
- Résistance d'isolement : 5000 MΩ min.

DIMENSIONS DES BOITIERS



Nbre de contacts	3	5	7	9	11	13	15	17	19	
A±0.3	14.2	16.7	19.3	21.8	24.3	26.9	29.4	32.0	34.5	
B	9.34	11.88	14.42	16.96	19.50	22.04	24.58	27.12	29.66	
Nbre de contacts	21	23	25	27	29	31	33	35	37	
A±0.3	37.0	39.6	42.1	44.7	47.2	49.7	52.3	54.8	57.7	
B	32.20	34.74	37.28	39.82	42.36	44.90	47.44	49.98	52.52	
Nbre de contacts	39	41	43	45	47	49	51	53	55	
A±0.3	59.9	62.4	65.0	67.5	70.1	72.6	75.1	77.7	80.2	
B	55.06	57.60	60.14	62.68	65.22	67.76	70.30	72.84	75.38	
Nbre de contacts	57	59	61	63	65	67	69	71	73	75
A±0.3	82.8	85.3	87.8	90.4	92.9	95.5	98.0	100.5	103.1	105.6
B	77.92	80.46	83.00	85.54	88.08	90.62	93.16	95.70	98.24	100.78

CODIFICATION

CONNECTEUR MÂLE

Mini 9 **FM** **33** **000** **R3** **A** **3** **0.8**

Nombre de contacts

Spécificité (éventuelle)

Sans spécificité : produit standard = 000

Variante de sorties des contacts

R1, R3, V1, V2, Y1, Y2, Y3

Variante de fixations

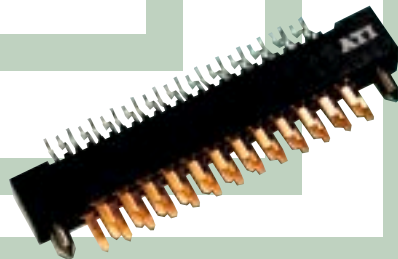
A, B, C, E, F, G, H (guide lisse)
 J, K, FE, GE, HE, S, V (guide fileté)
 AS (positionneur brasé)

Protection des sorties des contacts

Alliage d'étain = 3

Protection de la zone de contact

Standard : épaisseur 0.8 micron mini. = 0.8
 Autre* : épaisseur 1.27 micron = 1.2



CONNECTEUR FEMELLE

Mini 9 **EF** **33** **000** **Y3** **Q** **3** **0.8**

Nombre de contacts

Spécificité (éventuelle)

Sans spécificité : produit standard = 000

Variante de sorties des contacts

C1, R1, R2, R3, V1, V2, V3, Y1, Y2, Y3

Variante de fixations

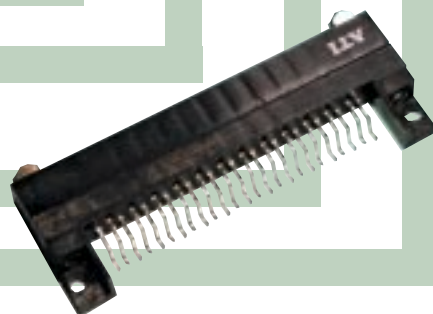
P, Q, R, T, TS, U (guide lisse)
 Z (guide taraudé)
 RS (positionneur brasé)

Protection des sorties des contacts

Alliage d'étain = 3

Protection de la zone de contact

Standard : épaisseur 0.8 micron mini. = 0.8
 Autre* : épaisseur 1.27 micron = 1.2



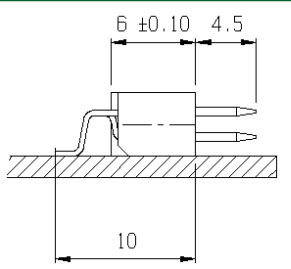
* La réalisation de protection différente du standard implique une quantité minimale de contacts : nous consulter

CONNECTEUR MÂLE / CONTACTS COUDÉS

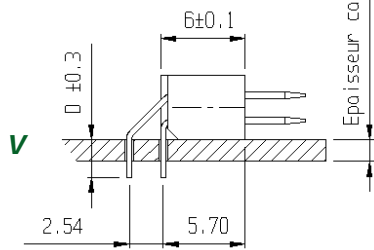
Sorties

CMS

R1



A piquer sur CI



Ep. S	Dépass ^t D	Réf. contact
1.6	2.9	V1
2.4	3.7	V2

Fixations

À braser sur CI

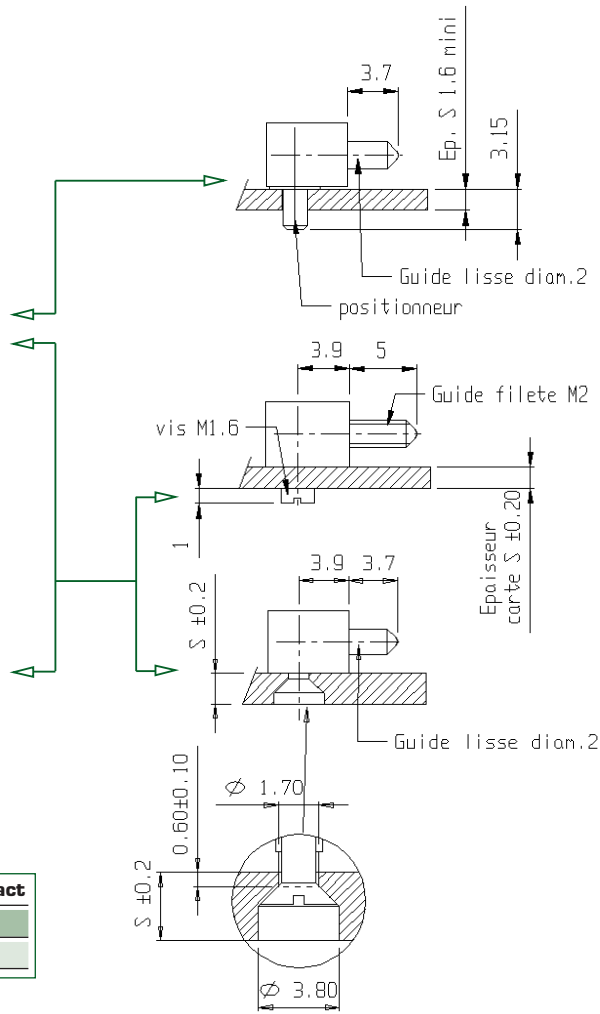
AS

À verrouiller sur CI

Ep. S	Guide lisse	Guide fileté
0.8	A	J
1.6 à 2.4	B	K
3.2 à 4	C	S

À verrouiller sur CI Vis tête fraisée

1.6 mini	E	V
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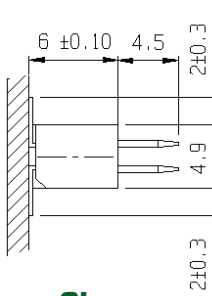


CONNECTEUR MÂLE / CONTACTS DROITS

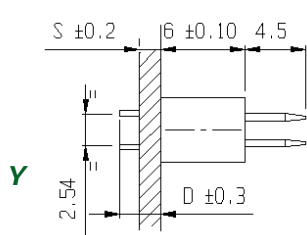
Sorties

CMS

R3



A piquer sur CI

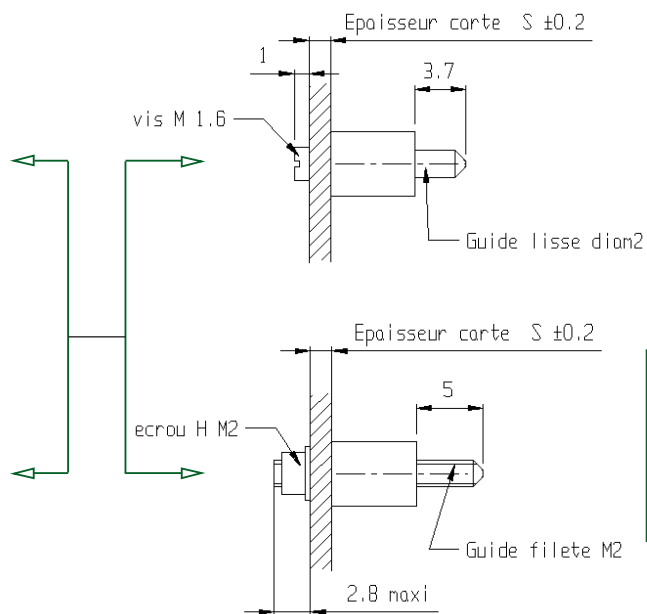


Ep. S	Dépass ^t D	Réf. contact
1.6	2.9	Y1
2.4	3.7	Y2
3.2	4.5	Y3

Fixations

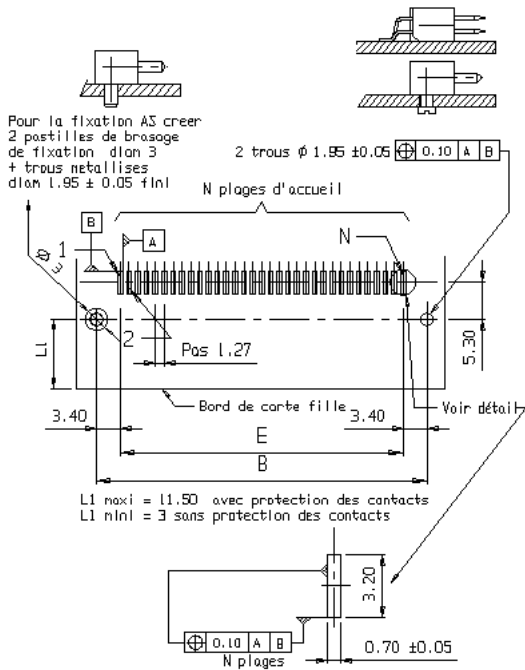
À verrouiller sur CI

Ep. S	Guide lisse	Guide fileté
1.6	F	FE
2.4	G	GE
3.2	H	HE

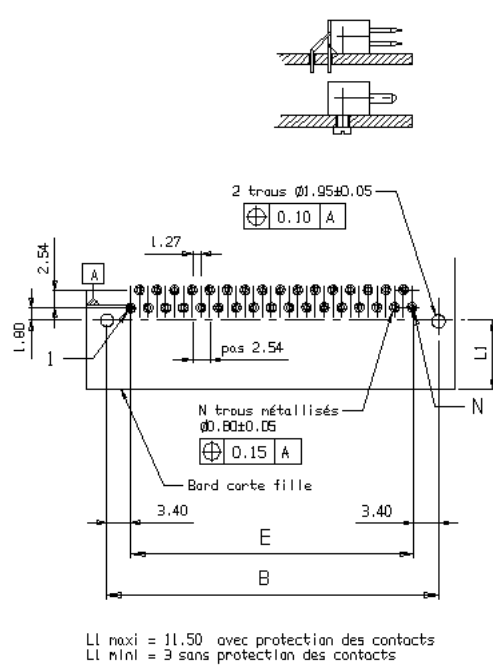


IMPLANTATIONS CONNECTEUR MÂLE

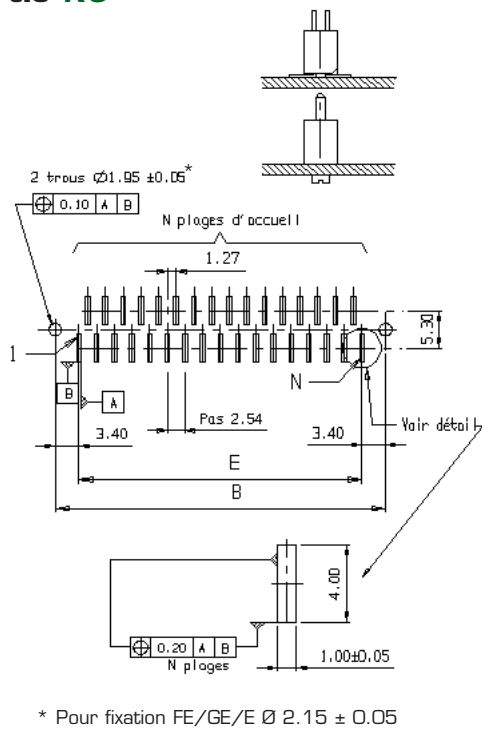
Sortie R1



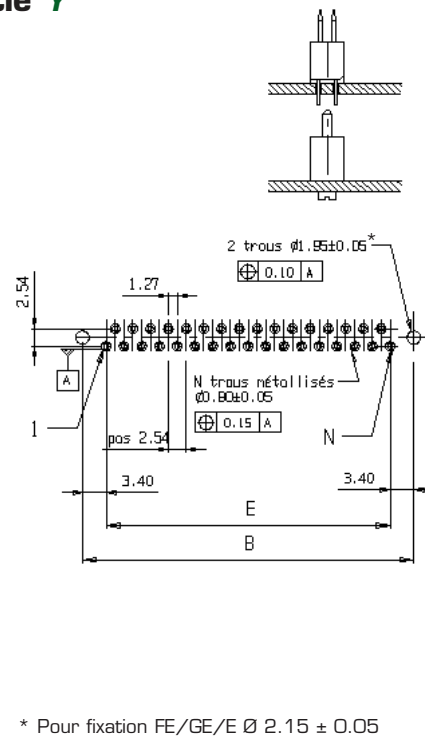
Sortie V



Sortie R3



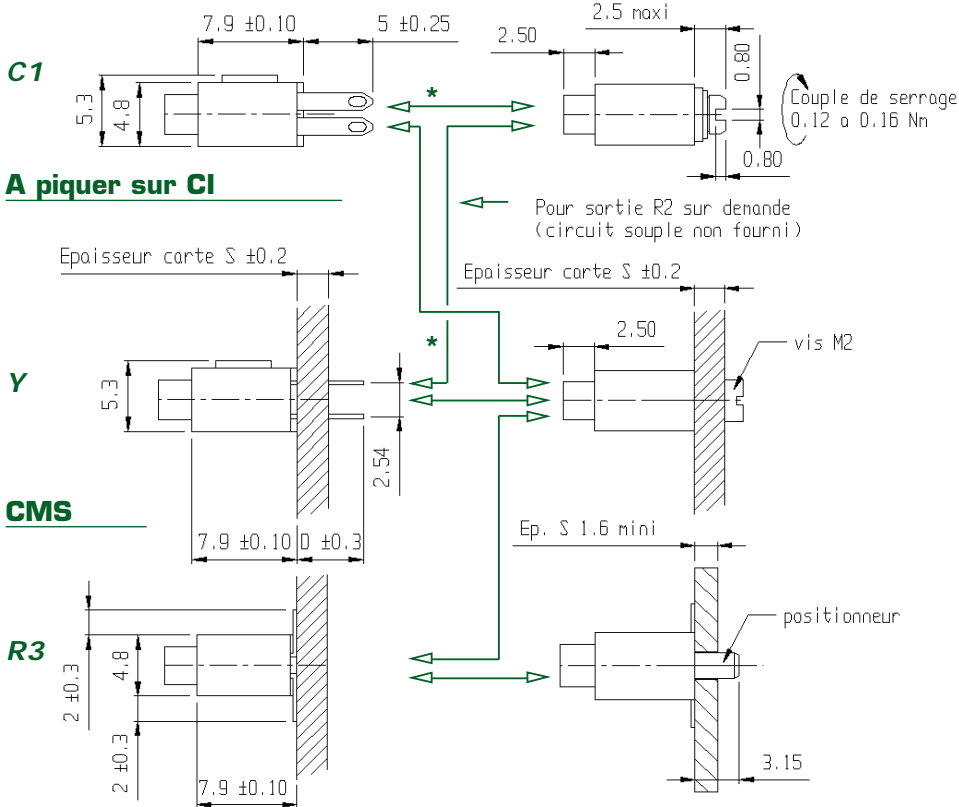
Sortie Y



CONNECTEUR FEMELLE / CONTACTS DROITS

Sorties

À braser sur fil gauge 24



Fixations

Connecteur libre

Guide lisse	Guide taraudé
P	Z

À verrouiller sur CI

Ep. S	
1.6 à 2.4	Q
3.2 à 4	R

À braser sur CI

1.6 mini	RS
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Ep. S	Dépass ^t D	Réf. contact
1.6	2.9	Y1
2.4	3.7	Y2
3.2	4.5	Y3

* Pour les sorties C1 et Y, le barreau de renfort est impératif à partir de la taille 33 et est inclus dans la référence du connecteur.
Pour les demandes spécifiques sans barreau, nous contacter.

CONNECTEUR FEMELLE / CONTACTS COUDÉS

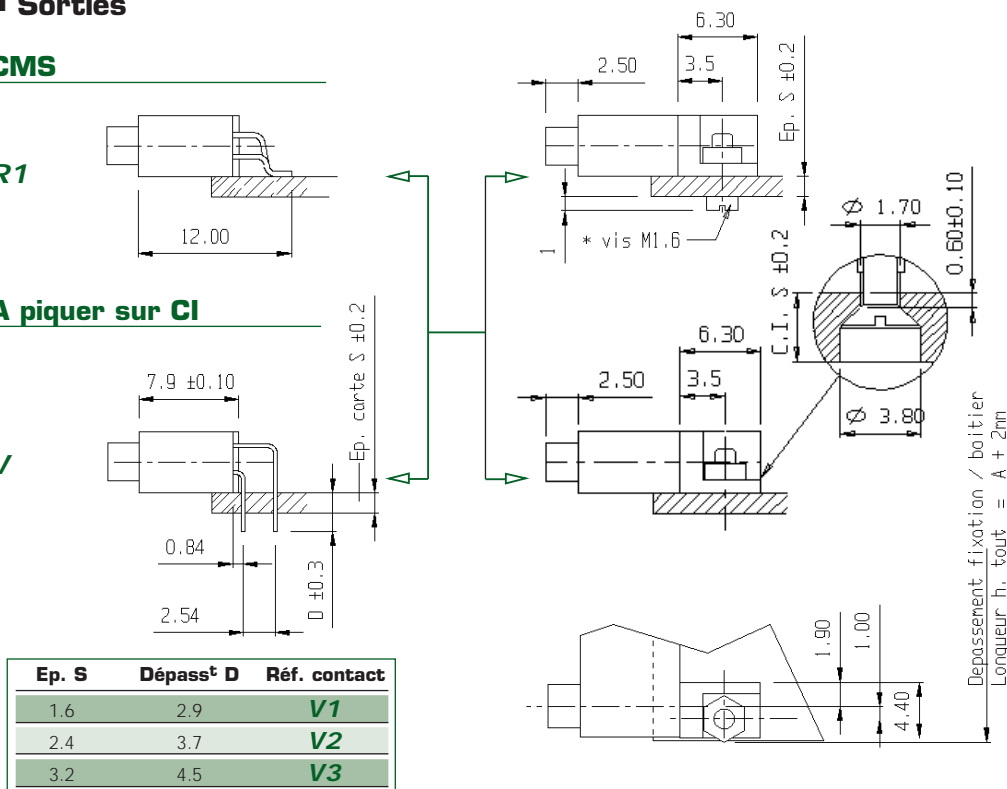
Sorties

CMS

R1

A piquer sur CI

V



Fixations

Ep. S

1.6 à 2.4	T
3.2 à 4	U

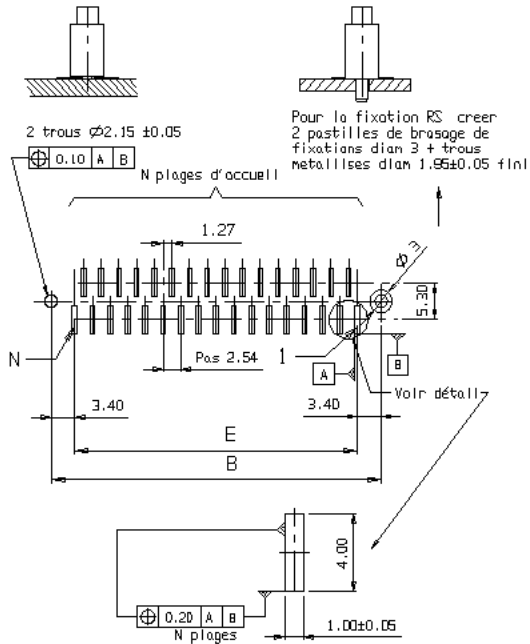
Ep. S

1.6 mini	TS
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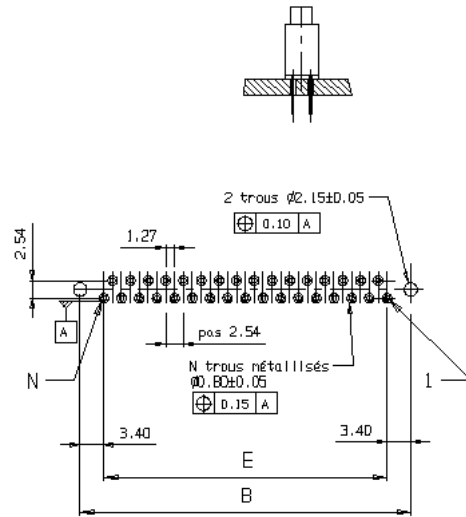
Ep. S	Dépass ^t D	Réf. contact
1.6	2.9	V1
2.4	3.7	V2
3.2	4.5	V3

IMPLANTATIONS CONNECTEUR FEMELLE

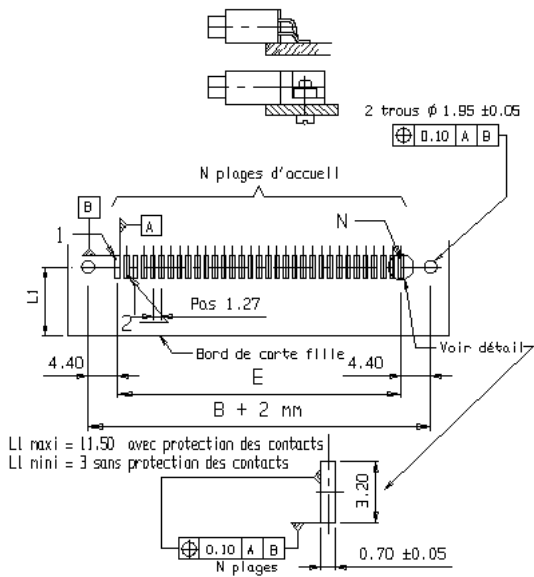
Sortie R3



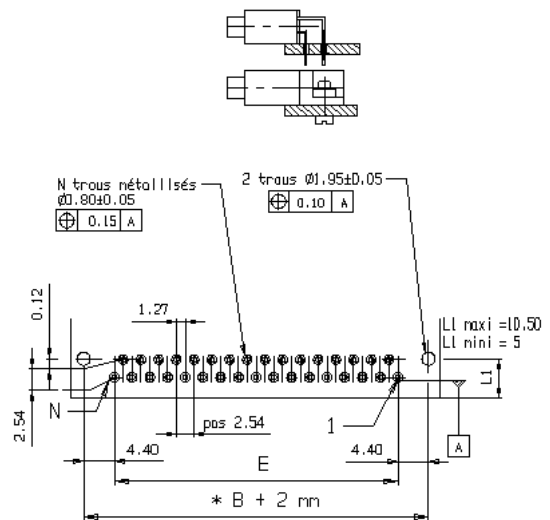
Sortie Y



Sortie R1

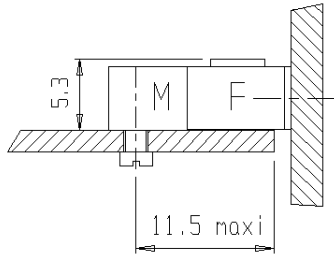


Sortie V

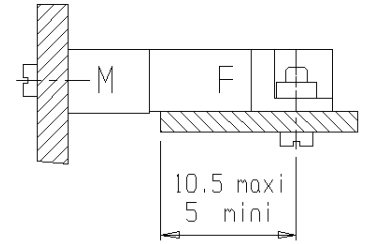


RÉCAPITULATIF - DÉBORDEMENT CARTE

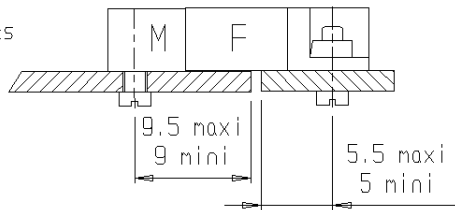
Avec protection des contacts mâles



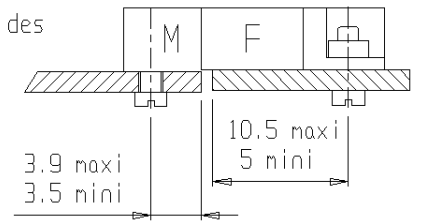
Sans protection des contacts mâles



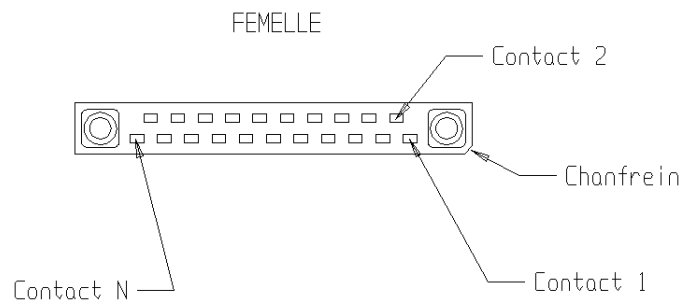
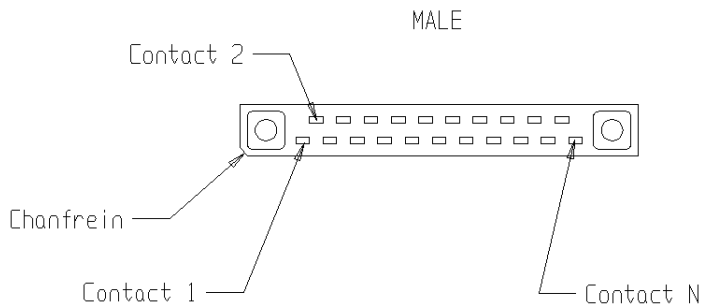
Avec protection des contacts mâles



Sans protection des contacts mâles



REPÉRAGE DES CONTACTS - VUE CÔTÉ ENFICHAGE



MINI 9 - 2.54 MM PITCH



MINI 9 connector is :

- Miniature connector 2 rows - 4.9 thickness
- Issued from HE 809 connector series and offering the same technical characteristics
- Strong male contact
- Accepting connector separation without contact interruption > 1.5 mm
- Excellent performance in vibration environment

Materials

- Insulator body : Thermoplastic class UL 94 V0
- Contacts : Stamped, copper alloy
- Guides : Stainless steel

Plating

- Gold on contact side - Tin alloy on termination side

Characteristics

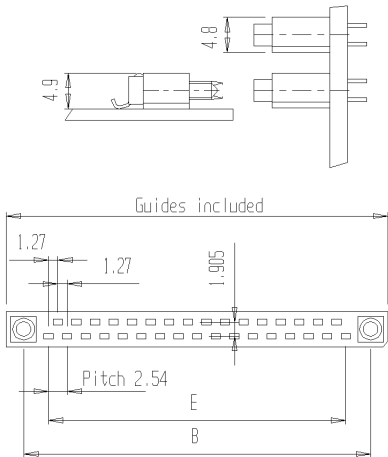
Mechanical

- Mechanical endurance : 500 mating/unmating operations min.
- Sinusoidal vibrations: 0/2000 Hz – 20 g efficace - disturbance < 2 ns
- Random vibrations: 0/2000 Hz – 9 g efficace - disturbance < 2 ns
- Mating/unmating forces : 0,14 to 0.7 N per contact
- Climatic category : - 55° C to + 125° C

Electrical

- Working voltage : 150 Veff. 50 Hz
- Proof voltage : 750 Veff. 50 Hz
- Nominal current : 3 A
- Contact resistance : 12 mΩ max.
- Insulation resistance : 5000 MΩ min.

MOULD SIZES



Nb of contacts	3	5	7	9	11	13	15	17	19	
A±0.3	14.2	16.7	19.3	21.8	24.3	26.9	29.4	32.0	34.5	
B	9.34	11.88	14.42	16.96	19.50	22.04	24.58	27.12	29.66	
Nb of contacts	21	23	25	27	29	31	33	35	37	
A±0.3	37.0	39.6	42.1	44.7	47.2	49.7	52.3	54.8	57.7	
B	32.20	34.74	37.28	39.82	42.36	44.90	47.44	49.98	52.52	
Nb of contacts	39	41	43	45	47	49	51	53	55	
A±0.3	59.9	62.4	65.0	67.5	70.1	72.6	75.1	77.7	80.2	
B	55.06	57.60	60.14	62.68	65.22	67.76	70.30	72.84	75.38	
Nb of contacts	57	59	61	63	65	67	69	71	73	75
A±0.3	82.8	85.3	87.8	90.4	92.9	95.5	98.0	100.5	103.1	105.6
B	77.92	80.46	83.00	85.54	88.08	90.62	93.16	95.70	98.24	100.78

ORDERING INFORMATION

MALE CONNECTOR **Mini 9** **FM** **33** **000** **R3** **A** **3** **0.8**

Number of contacts

Option

Without : standard product = 000

Termination styles

R1, R3, V1, V2, Y1, Y2, Y3

Guide styles

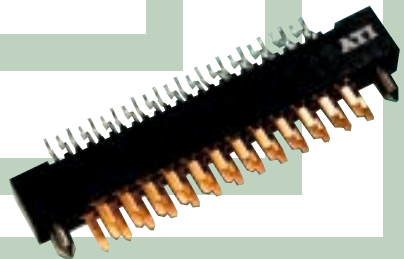
A, B, C, E, F, G, H (guide without coding)
 J, K, FE, GE, HE, S, V (threaded guide)
 AS (metal solder lock)

Termination plating

Tin alloy = 3

Contacts area plating

Standard : 0.8 micron min. gold thickness = 0.8
 Other* : 1.27 micron min. gold thickness = 1.2



FEMALE CONNECTOR **Mini 9** **EF** **33** **000** **Y3** **Q** **3** **0.8**

Number of contacts

Option

Without : standard product = 000

Termination styles

C1, R1, R2, R3, V1, V2, V3, Y1, Y2, Y3

Guide styles

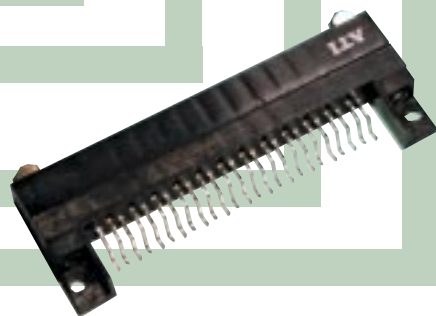
P, Q, R, T, TS, U (guide without coding)
 Z (threaded guide)
 RS (metal solder lock)

Termination plating

Tin alloy = 3

Contacts area plating

Standard : 0.8 micron min. gold thickness = 0.8
 Other* : 1.27 micron min. gold thickness = 1.2



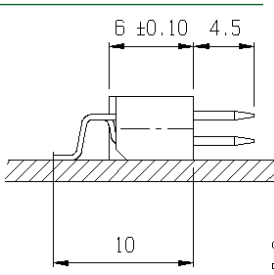
* Non standard plating can be supplied but a minimum contacts quantity is required : please contact us.

MALE CONNECTOR / RIGHT ANGLE MOUNTING

Termination styles

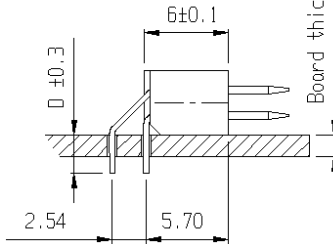
SMT

R1



Through p.c.b. mounting

V



P.c.b. thickness S	Depass ^t D	Contact ref.
1.6	2.9	V1
2.4	3.7	V2

Guides

Solder on p.c.b.

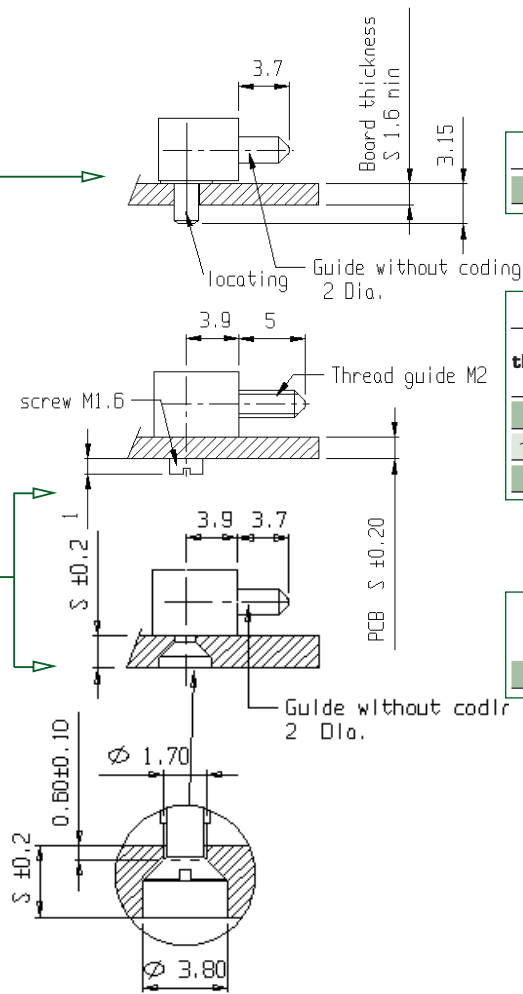
AS

Lockable on p.c.b.

P.c.b. thickness S	Guide without coding	Threaded guide
0.8	A	J
1.6 to 2.4	B	K
3.2 to 4	C	S

Lockable on p.c.b. Flat head screw

1.6 min. E V

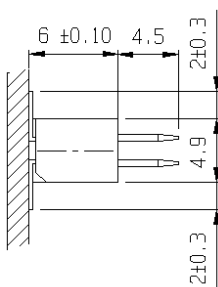


MALE CONNECTOR / STRAIGHT MOUNTING

Termination styles

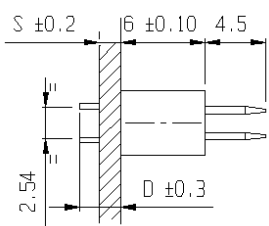
CMS

R3



Through p.c.b. mounting

Y

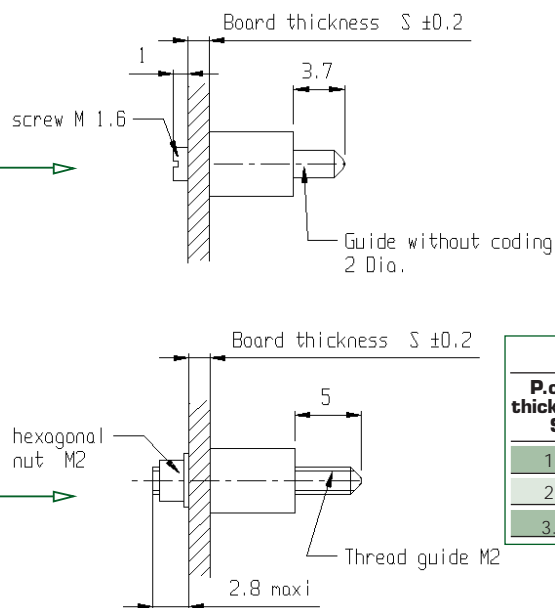


P.c.b. thickness S	Depass ^t D	Contact ref.
1.6	2.9	Y1
2.4	3.7	Y2
3.2	4.5	Y3

Guides

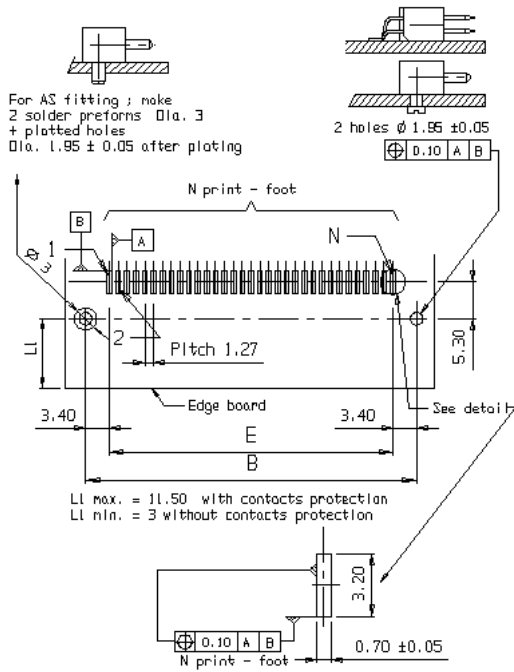
Lockable on p.c.b.

P.c.b. thickness S	Guide without coding	Threaded guide
1.6	F	FE
2.4	G	GE
3.2	H	HE

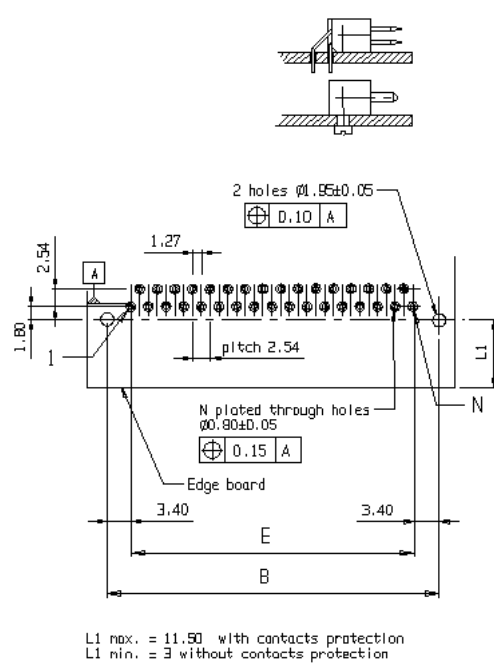


MALE P.C.B. LAYOUT

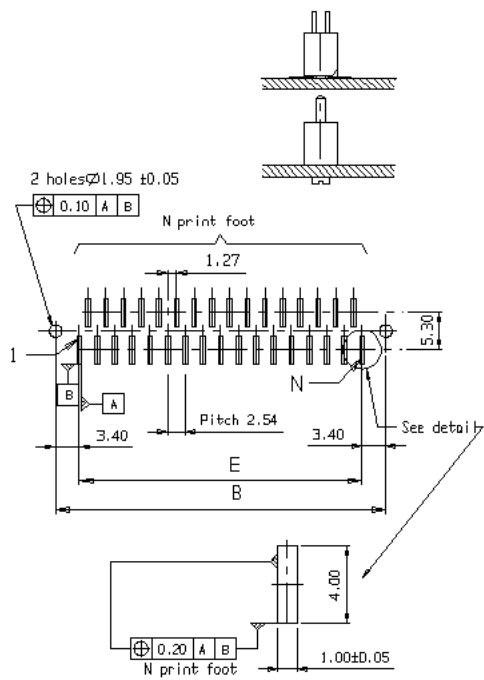
Termination style R1



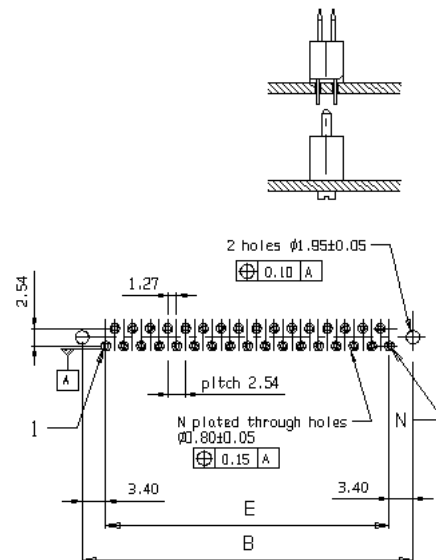
Termination style V



Termination style R3



Termination style Y

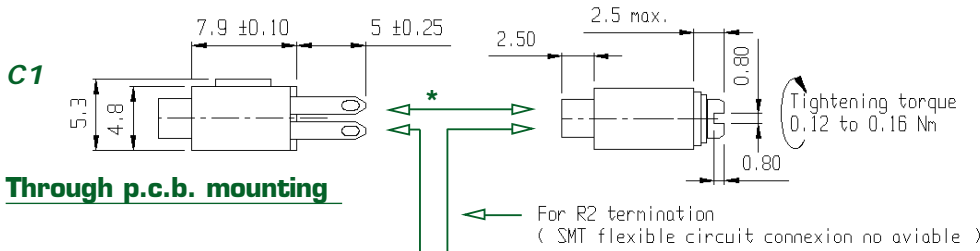


FEMALE CONNECTOR / STRAIGHT MOUNTING

Termination styles

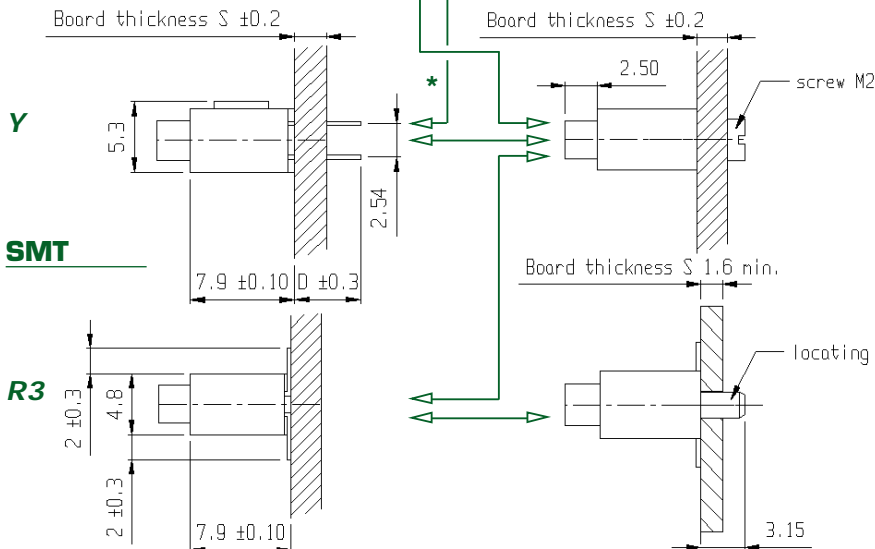
Guides

Solder wire AWG 24



Guide without coding for free connector (no fixed)	
Guide without coding	Threaded guide*
P	Z

Through p.c.b. mounting



Lockable on p.c.b.	
P.c.b. thickness S	
1.6 to 2.4	Q
3.2 to 4	R

Solder on p.c.b.	
1.6 mini	RS

P.c.b. thickness S	Depass ^t D	Contact ref.
1.6	2.9	Y1
2.4	3.7	Y2
3.2	4.5	Y3

* For C1 and Y termination styles, the stiffening bar is obligatory above size 33 and is included in connector part number.

For specific requests without stiffening bar, consult us.

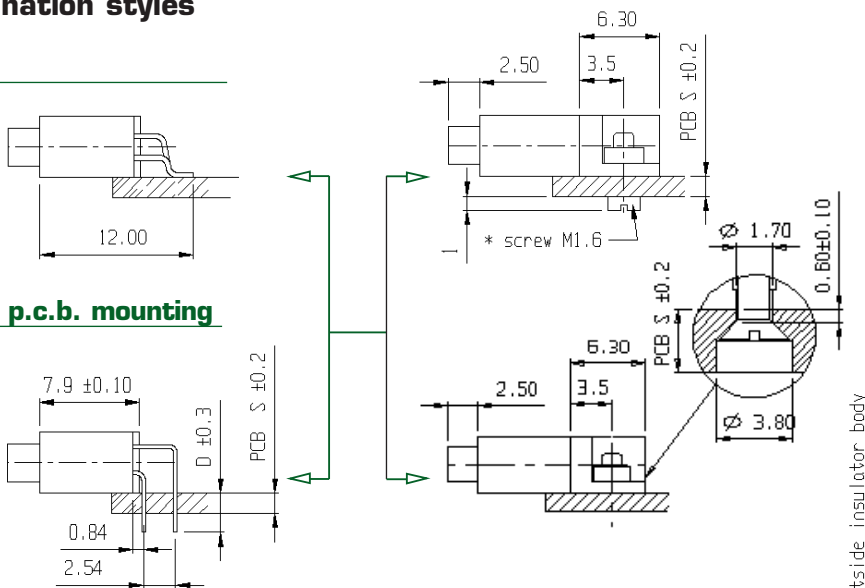
FEMALE CONNECTOR / RIGHT ANGLE MOUNTING

Termination styles

Guides

SMT

R1



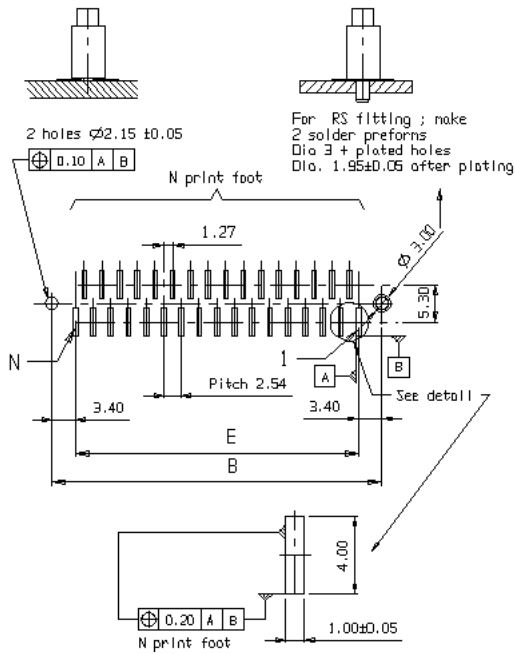
P.c.b. thickness S	
1.6 to 2.4	T
3.2 to 4	U

P.c.b. thickness S	
1.6 min.	TS

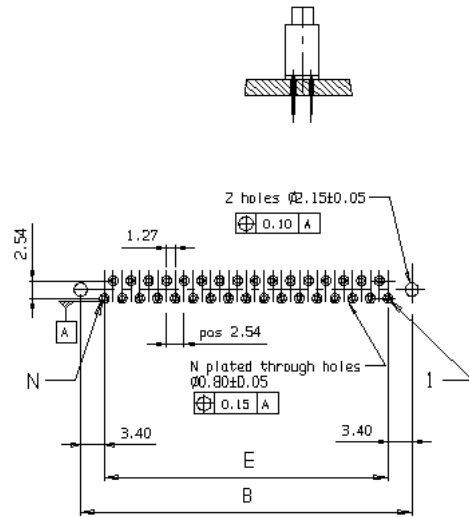
P.c.b. thickness S	Depass ^t D	Contact ref.
1.6	2.9	V1
2.4	3.7	V2
3.2	4.5	V3

FEMALE P.C.B. LAYOUT

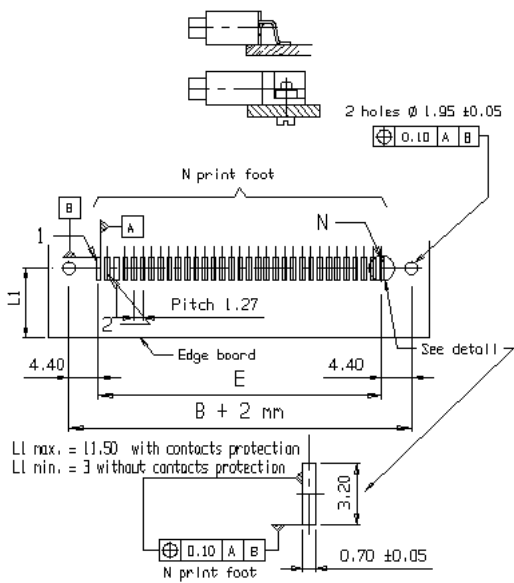
Termination style R3



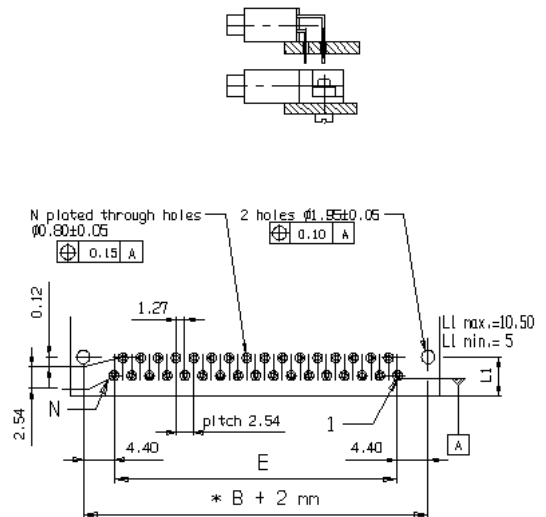
Termination style Y



Termination style R1

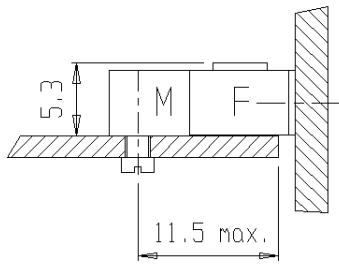


Termination style V

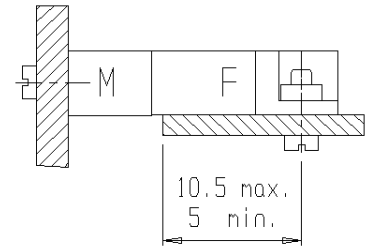


SUMMARY OF P.C.B. OVERLAP

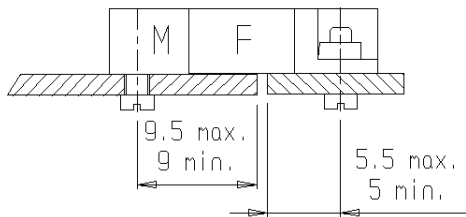
With male contacts protection



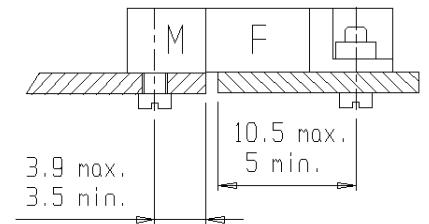
Without male contacts protection



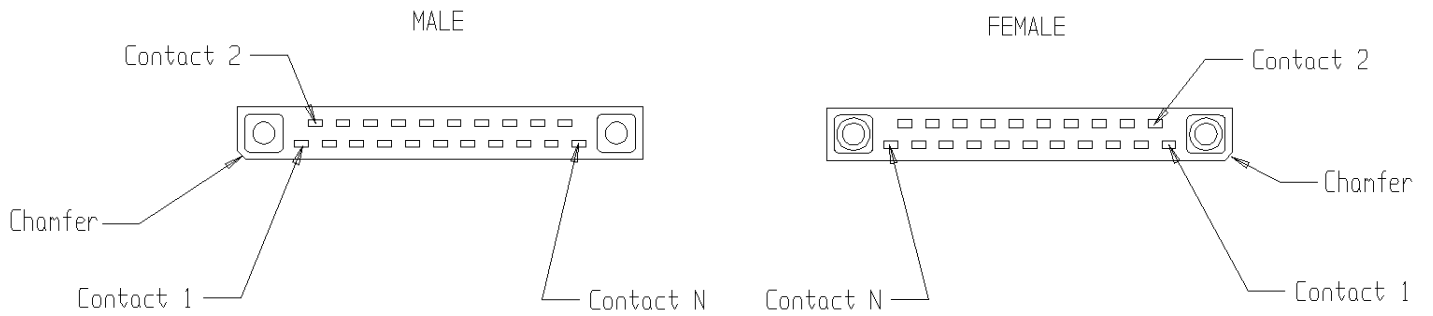
With male contacts protection



Without male contacts protection



CONTACTS IDENTIFICATION - VIEW FROM MATING SIDE



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